

the third portion is generally aligned with a flow direction of the cooling air from the second air mover.

9. The electronic device of claim 1 wherein:

the heat spreader includes a first portion, a second portion extending away from the first portion in a first direction, and a third portion extending away from the first portion in a second direction opposite the first direction;

the first portion is generally corresponding to the heat source;

the second and third portions are offset from the heat source; and

the second and third portions are both generally aligned with a flow direction of the cooling air from the air mover.

10. The electronic device of claim 1 wherein the heat spreader includes a first section and second section extending from the first section along a flow direction of the cooling air, at least one of the first or second section of the heat spreader having a flow modification feature configured to affect a value of Reynolds number associated with the cooling air flowing past the first or second section.

11. The electronic device of claim 1 wherein:

the heat spreader includes a first section and second section extending from the first section along a flow direction of the cooling air;

the first section includes a protrusion into the gap between first surface of the heat spreader and the housing panel; and

the first section corresponds to an area of the first surface having a lower temperature than another area of the first surface corresponds to the second section.

12. An electronic device, comprising:

a processor having a first surface area;

a heat spreader in direct contact with the processor, the heat spreader having a second surface area greater than the first surface area of the processor;

a housing panel spaced apart from the heat spreader by a gap, the housing panel having an air inlet proximate a first end of the gap and an air outlet proximate a second end of the gap; and

an air mover proximate the first or the second end of the gap, the air mover being configured to move cooling air through the gap from the air inlet toward the air outlet of the housing panel.

13. The electronic device of claim 12 wherein the gap has a size that allows a laminar flow of the cooling air from the air inlet toward the air outlet of the housing panel.

14. The electronic device of claim 12 wherein the gap has a size that allows a flow of the cooling air from the air inlet

toward the air outlet of the housing panel to have a Reynolds number between about 10 to about 2,000.

15. The electronic device of claim 12 wherein heat spreader includes a vapor chamber having a first surface in contact with the processor and a second surface spaced apart from the housing panel by the gap.

16. The electronic device of claim 12 wherein:

the heat spreader includes a vapor chamber having a first surface in contact with the processor and a second surface spaced apart from the housing panel by the gap; and

the first and second surfaces are generally planar.

17. The electronic device of claim 12 wherein:

the heat spreader includes a vapor chamber having a first surface in contact with the processor and a second surface spaced apart from the housing panel by the gap; and

at least one of the first or second surface is non-planar and having one or more fins.

18. A method of operating an electronic device, comprising:

removing heat produced by a heat source in the electronic device via conduction;

distributing the removed heat to a surface area of a housing panel of the electronic device, the surface area being larger than that of the heat source;

enabling passive heat dissipation through the surface area of the housing panel with the distributed heat;

providing a cooling air to flow from an air inlet of the electronic device, past the surface area of the housing panel, to an air outlet of the electronic device; and

enabling active heat dissipation by expelling the cooling air from the electronic device.

19. The method of claim 18 wherein:

distributing the removed heat includes distributing the removed heat to the surface area in a first direction; and providing the cooling air includes providing the cooling air to flow from the air inlet of the electronic device, past the surface area of the housing panel, to the air outlet of the electronic device in a second direction generally perpendicular to the first direction.

20. The method of claim 18 wherein:

enabling passive heat dissipation includes enabling heat dissipation from the surface area of the housing panel via at least one of natural convection or radiation; and enabling active heat dissipation includes enabling heat dissipation to the cooling air via forced convection.

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